WHAT IS CLAIMED IS:

1. A method for multi-layered tissue culturing in vitro, comprising:
providing a porous multi-layered carrier having a hollow cavity;
placing tissue blocks within said hollow cavity of said carrier;
seeding cells into said carrier; and
2. incubating said tissue blocks and cells within said carrier in a culture mediumThe method according to claim 1, wherein the diameters of said tissue blocks are larger than the pore diameters of said porous multi-layer carrier.
3. The method according to claim 1, wherein the pore diameter of said multi-layer porous carrier ranges from 50 to 500 μm.
4. The method according to claim 1, wherein the diameter of said tissue blocks ranges from 500 to1000 μm.
5. The method according to claim 1, wherein said tissue blocks can be granulated carriers attached with cells or cell aggregates.
6. The method according to claim 1, wherein said multi-layer porous carrier is preferably made of bioabsorbable polymer material.
7. The method according to claim 6, wherein said bioabsorbable polymer materials can be selected from the group consisting of polyglycolic acid (PGA), polylactic acid (PLA), poly (lactic-co-glycolic) acid (PLGA), polyanhydride, polycapralactone (PCL), polydioxanone and polyorthoester.
8. The method according to claim 1, wherein said carrier is made from combining absorbable polymer material and other materials.
9. The method according to claim 8, said other materials can be selected from the group consisting of: hydroxyapatite(HAP), tricalcium phosphate (TCP), tetracalcium phosphate(TTCP), dicalcium phosphate anhydrous (DCPA), dicalcium phosphate dihydrate(DCPD), octacalcium phosphate (OCP), calcium pyrophosphate (CPP) , collagen, gelatin, hyaluronic acid, chitin, and poly(ethylene glycol).
10. A multi-layered porous carrier comprises:
a hollow cavity for receiving tissue blocks, wherein said hollow cavity is

surrounded by a wall of porous substrate; and

a porous structure which is located under said hollow cavity and provides for cell attachment.

11. The multi-layered porous carrier according to claim 10, wherein the diameter of said tissue blocks ranges from 500 to1000μm.

12. The multi-layer porous carrier according to claim 10, wherein the pore diameter of said multi-layer porous carrier ranges from 50 to 500μm.

13. The multi-layer porous carrier according to claim 10, wherein said multi-layer porous carrier is preferably made of bioabsorbable polymer material.

14. The multi-layer porous carrier according to claim 13, wherein said bioabsorbable polymer materials can be selected from the group consisting of polyglycolic acid (PGA), polylactic acid (PLA), poly (lactic-co-glycolic) acid (PLGA), polyanhydride, polycapralactone (PCL), polydioxanone and polyorthoester.

15. The multi-layer porous carrier according to claim 13, wherein said bioabsorbable polymer material can be composite materials that combine said absorbable polymer material and other materials.

16. The multi-layer porous carrier according to claim 15, wherein said other materials can be selected from the group consisting of: hydroxyapatite (HAP), tricalcium phosphate (TCP), tetracalcium phosphate (TTCP), dicalcium phosphate anhydrous (DCPA), dicalcium phosphate dihydrate (DCPD), octacalcium phosphate (OCP), calcium pyrophosphate (CPP), collagen, gelatin, hyaluronic acid, chitin, and poly(ethylene glycol).

17. A multi-layer implant fabricated using the method of claim 1 comprising steps of:

providing a porous multi-layered carrier having a hollow cavity;

placing tissue blocks within said hollow cavity of said carrier;

seeding cells into said carrier; and

incubating said tissue blocks and cells within said carrier in a culture medium.

18. The multi-layer implant according to claim 17, wherein said implant is bone implant.

19. The method according to claim 17, wherein said cell is any preparation of living tissue, including primary tissue explants and preparations thereof, an isolated cell, and a cell line.